IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 1 in accordance with the following:

1. **(currently amended)** A recording medium comprising:

a merged bit stream comprising a plurality of bit streams, each of the plurality of bit streams having time information units inserted at predetermined intervals recorded therein, and

control information which represents whether the time information units are temporally discontinuous recorded at a boundary between adjacent ones of the plurality of bit streams, <u>the control information enabling a reproducing apparatus to seamlessly reproduce the plurality of bit streams</u>.

2. **(original)** The recording medium of claim 1, wherein each of the plurality of bit streams has at least one associated system clock reference (SCR) value which is continuous within each of the plurality of bit streams and the control information is control information which represents whether the SCR values are temporally discontinuous.

3. **(original)** The recording medium of claim 1, wherein each of the plurality of bit streams has at least one associated system clock reference (SCR) value which is continuous within each of the plurality of bit streams and the control information includes at least one information among a control information identifier, a control information length indicator, and a discontinuity indicator representing whether the SCR values are discontinuous.

4. **(original)** A method of merging a plurality of bit streams having time information units inserted at predetermined intervals, the method comprising:

merging the plurality of bit streams to generate a merged bit stream; and

inserting control information at a boundary between adjacent ones of the plurality of bit streams, the control information representing whether the time information units of adjacent merged bit streams are temporally discontinuous.

5. **(original)** The method of claim 4, wherein the inserting of the control information comprises inserting SCR control information representing that the SCR values between adjacent ones of the plurality of bit streams are temporally discontinuous.

6. **(original)** The method of claim 4, wherein the inserting of the control information comprises inserting at least one information among a control information identifier, a control information length indicator, and a discontinuity indicator representing whether the time information units of adjacent merged bit streams are discontinuous.

7. **(original)** A method of reproducing a merged bit stream into which a plurality of bit streams are merged by a recording/editing/reproducing apparatus, into which time information units are inserted at predetermined intervals in synchronization with time information counted by the recording/editing/reproducing apparatus, the method comprising;

starting a counter and outputting a counted value;

reproducing one of the plurality of bit streams having an inserted time information unit which matches the counted value;

determining whether the SCR control information representing that a first time information unit of a next bit stream of the plurality of bit streams is temporally discontinuous, with respect to a last time information unit of the one bit stream, exists at a boundary between the one bit stream and the next bit stream;

resetting the output value of the counter to correspond to the time information unit of the next bit stream if the temporal discontinuity exists; and

seamlessly reproducing the next bit stream by matching the inserted time information unit of the next bit stream with the reset counted value.

8. **(original)** The method of claim 7, wherein the time information unit is a system clock reference (SCR) value counted by the recording/editing/reproducing apparatus, wherein the resetting of the output value comprises:

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setting the counted value to a first SCR value of the next bit stream where the control information indicates a temporal discontinuity in the SCR values of the one bit stream and the next bit stream.

9. **(original)** The method of claim 7, wherein the SCR control information comprises at least one among a control information identifier, a control information length indicator, and a discontinuity indicator representing whether the SCR values are discontinuous.

10. **(original)** An apparatus for reproducing merged a bit stream into which a plurality of bit streams are merged on a recording medium by a recording/editing/reproducing apparatus and into which SCR control information is inserted, the apparatus comprising:

a buffer which reads one of the plurality of bit streams from the recording medium on a packet-by-packet basis and temporarily stores the packets of the read bit stream;

a reproduction processor which converts the one bit stream received from the buffer into audio or video;

a counter which outputs a counted value corresponding to timing information; and

a reproduction controller which:

controls transmission of the packets stored in the buffer to the reproduction processor if the counted value is the same as an SCR value of the packet stored in the buffer, and

resets the counted value of the counter if the SCR control information representing that the SCR values are temporally discontinuous is read from a boundary of the bit streams which are merged, thereby accomplishing reproduction of the merged bit stream.

11. **(original)** The apparatus of claim 10, wherein the reproduction controller sets the SCR value of the counter to be a first SCR value of a second bit stream of the merged bit stream, if the control information, which is SCR control information representing whether the merged bit streams are temporally discontinuous, is read at the boundary between the merged bit streams.

12. **(original)** The apparatus of claim 10, wherein the buffer reads the control information which comprises at least one among a control information identifier, a control

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information length indicator, and a discontinuity indicator representing whether the SCR values are discontinuous.

13. **(original)** The apparatus of claim 10, wherein the counter is built-in the reproduction controller.

14. **(original)** A method of merging first and second program streams, each program stream comprising a packetized elementary stream and a system clock reference value, wherein a value of the system clock reference of the second program stream is a value different from a value normally expected based on the system clock reference value of the first program stream, the method comprising:

determining the existence of the different value; and

inserting control information at a boundary between the first and second program streams indicating that the system clock reference value of the second program stream is different from the normally expected value.

15. **(original)** A method of reproducing merged first and second program streams, each program stream comprising a packetized elementary stream and a system clock reference value, wherein the value of the system clock reference of the second stream is a different value from a normally expected value based on the system clock reference value of the first program stream and wherein control information exists at a boundary between the first and second program streams indicating that the system clock reference value of the second program stream is different from the normally expected value, the method comprising:

starting a counter and outputting a counted value corresponding to timing information;

reproducing the first program stream based on matching the counted value with the system clock reference value of the first program stream;

determining whether the control information exists at the boundary indicating that the system clock reference value of the second program stream is the different value;

resetting the output value of the counter to correspond to the different value if the control information exists at the boundary;

reproducing the second program stream based on matching the reset counted value with the system clock reference value of the second program stream.

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16. (**original**) An apparatus for reproducing merged first and second program streams, each program stream comprising a packetized elementary stream and a system clock reference value, wherein a value of the system clock reference of the second stream is a value different from a value normally expected based on the system clock reference value of the first program stream and wherein control information exists at a boundary between the first and second program streams indicating that the system clock reference value of the second program stream is different from the normally expected value, the apparatus comprising:

a counter which outputs a counted value corresponding to timing information; and

a controller which:

reproduces the first program stream based on matching the counted value with the system clock reference value of the first program stream,

determines whether the control information exists at the boundary,

resets the output value of the counter to correspond to the system clock reference value of the second program stream if the control information exists indicating that the system clock reference value of the second program stream is the different value, and

reproduces the second program stream based on matching the reset counted value with the system clock reference value of the second program stream.

17. (**original**) A merged program stream, comprising:

first and second program streams, each program stream comprising a packetized elementary stream and a system clock reference value, wherein the value of the system clock reference of the second program stream is a different value than a normally expected value based on the system clock reference value of the first program stream; and

control information inserted at a boundary between the first and second program streams indicating that the system clock reference value of the second program stream is different from the normally expected value based on the value of the system clock reference value of the first program stream.

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